Remarks

The title has been amended to more aptly describe the claimed invention.

The Examiner has rejected claims 1-10 and 17 on the grounds of being directed to non-statutory subject matter under 35 U.S.C. 101. More particularly, the claims were deemed to recite an abstract idea not within the technological arts. In that regard, amendments to independent claims 1 and 5 include, inter alia, recitations concerning encrypted information used to facilitate transactions over a telecommunications network. The fields of telecommunication, networks, and encryption are clearly appropriate subject matter under 35 U.S.C. 101, and favorable reconsideration is respectfully requested.

Claims 1-5, 8-11 and 14-16 stand rejected for anticipation under 35 U.S.C. 102(e) based on the Franklin et al. U.S. Patent No. 6,000,832. The Franklin patent is also the basis for rejection of claims 6 and 12 for obviousness under 35 U.S.C. 103(a). The other claims 7, 13 and 17 are rejected for obviousness under 35 U.S.C. 103(a) based on Franklin in view of Walker et al. U.S. Patent No. 6,163,771.

These rejections based on prior art references are respectfully traversed in view of the amendments to original claims 1-11 and 17 and related arguments set forth in detail below. In that regard, dependent claims 12-16 have been cancelled without prejudice and new dependent claims 18-21 have been added by amendment. All such amendments are supported by the original specification and drawings, and do not include any new matter.

Regarding such amendments, the Examiner's attention is directed for example to the textual description in the specification regarding the flow charts of Figs. 2A-2B and 3A-3B (encoding/parsing validation fields) and Figs. 4A-4B (computing/validating temporary authorization number).

The Franklin patent is concerned generally with e-commerce transactions, but discloses a system that requires a "Registration Phase" (column 6 lines 24-33) for obtaining a separate online commerce card. The new customer ID account number obtained by Registration that is displayed as part of a proxy transaction number is not encoded (see Figs. 5 and 6, and related description at column 10 lines 12-31), with the unfortunate result that this customer ID account number is not hidden from the merchant or safeguarded against online eavesdropping. See the comparison of an Acct. No. and related Transaction No. at column 10 lines 50-51.

In contrast the amended independent claims 1, 5 and 11 of the present invention recite that an e-commerce transaction occurs "without disclosing the credit card account number via the telecommunications network to the merchant."

There is only a <u>four digit portion</u> of the transaction number in Franklin that contains "an embedded code number (or MAC) that is specific to the online commerce transaction with the merchant" (column 10 lines 9-11). The bank verification of the transaction in Franklin is based on the bank creating a test MAC (message authentication code) for comparison with the embedded MAC in the transaction number.

In contrast the amended independent claims 1, 5 and 11 provide verification by a comparison of "multiple fields of encrypted information" with corresponding transaction information provided by the merchant. There are many references in the present specification supporting this feature in the claims. For example see the illustrated encoding of <u>ten transaction number digits into four data fields</u> as described in paragraph 14 at pages 6-7 of the present specification. Also as further described in paragraph 14:

"... some of the fields used by the bank to validate the transaction are encoded in a number used to generate the temporary authorization number."

The elimination of a displayed customer ID account number from the temporary authorization number in the present invention provides the added benefit of making additional digits available for more secure verification using multiple encoded data fields.

It is evident that the embedded MAC number disclosed in Franklin is always used with the displayed new online customer ID account number, and provides transaction verification in a less secure and different way from the amended claims 1, 5 and 11 (and their dependent claims).

In view of the foregoing discussion, it is submitted that the individual elements of the amended claims are not disclosed or suggested by the Franklin reference. Accordingly the Examiner is requested to withdraw the anticipation and obviousness rejections based on the Franklin reference.

The foregoing arguments regarding the Franklin reference are incorporated herein as a basis for withdrawal of the obviousness rejection of remaining claims 7 and 17 based on Franklin in view of Walker.
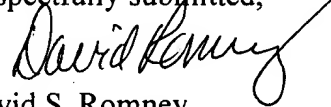
With regard to the Walker reference, it is noted that single use credit card number (CCN) includes a secret piece of information called a "nonce" that is assigned to each cardholder (see Fig. 6), along with an initialization variable (IV) to prevent an unauthorized re-use ("replay"). A separate private key is assigned to each cardholder for encrypting and decrypting the secret nonce. Apparently <u>for every transaction the same secret nonce</u> is encrypted with the assigned key and then concatenated with the IV and account number to form the single use CCN (see Walker column 8 lines 19-36, column 8 lines 62-65).

In contrast, the presently claimed multiple encrypted information fields are encoded each time with <u>different data regarding that specific transaction</u> to form the temporary transaction authorization number, thus providing a more secure purchase and authorization procedure. In view of the foregoing discussion, it is requested that the obviousness rejection of dependent claims 7 and 17 based on the Franklin and Walker references should be withdrawn.

It is also submitted that the recitation of other unique features regarding verification based on encoded fields of transaction-related information (e.g., dependent claims 2-3, 6, 8, 19-21) and encrypted passwords (e.g., dependent claims 4, 9) provide additional grounds for patentability over the cited references.

It is believed that the foregoing discussion confirms that remaining claims 1-11 and 17-21 are patentable over all the cited references and are now in condition for allowance, notice of which is earnestly solicited.

Respectfully submitted,

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